
NADS – NUCLEAR AND ATOMIC DATA SYSTEMS

Michael S. McKinley, Bret Beck, Dennis McNabb

Lawrence Livermore National Laboratory

We have developed NADS (Nuclear and Atomic Data Systems), a web-based interface for viewing pointwise and grouped cross-sections and distributions. Our implementation is a client/server model. The client is a java applet that displays the graphical interface, which controls the interactive 2-D, 3-D, and 4-D plots and tables, while the server is a process with data tables in RAM for enhanced access speeds. The server, which manipulates and serves the data, has been implemented in Python using the FUDGE package developed by Bret Beck at LLNL. Computational capabilities include algebraic manipulation and thermal heating of data by users. Many different evaluations are available including Livermore's ENDL-99 nuclear database, ENDF/B-V and ENDF/B-VI. Processed data tables used in Livermore transport codes are accessible as well. NADS is available from <http://nuclear.llnl.gov/>.